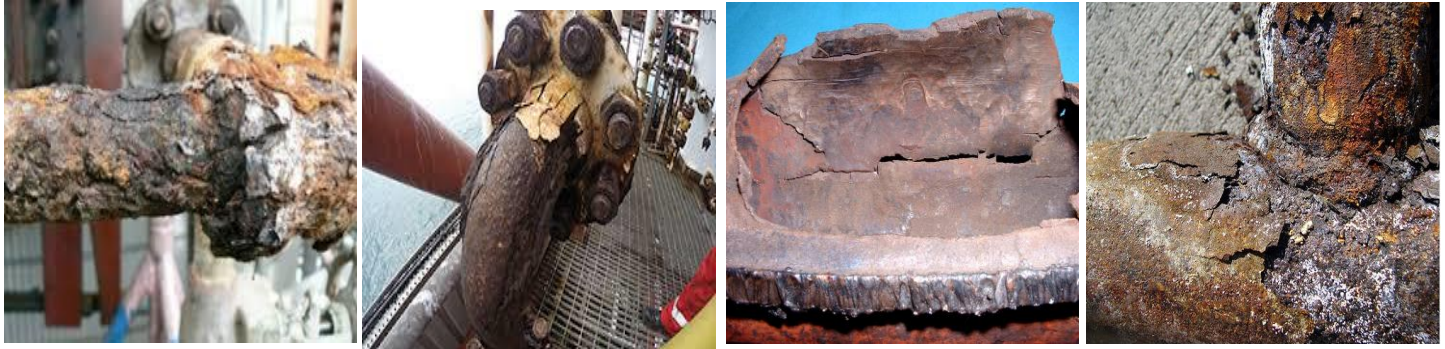


## Two Day Intensive training on “High temperature degradation of industrial component”



**Date:** 6<sup>th</sup> & 7<sup>th</sup> September, 2019

**Venue:** Evolve by TCR, 215 Pancham Icon, Nr. D-mart, Vasna Road, Vadodara, Gujarat.

**Timing:** 9:00 am to 6:00 pm

### Course Contents:

- Introduction to high temperature materials
- Metallurgical factors and process control for high temperature materials
- Damage Mechanisms for High Temperature Components
- Case Studies and Failure Investigation
- Inspection methods for early damage mechanisms to identify on-set of damage mechanisms

### Course fee:

Single participant:  
Rs. 20,000.00 for Indian delegates  
USD 400 for Foreign delegates.  
GST @ 18.00 % applicable on above fees.

### Payment mode:

Interested participants should mail/ E-mail the registration form along with DD/at par cheque in favour of “TCR ADVANCED ENGINEERING PVT. LTD.” at the address mentioned in attached registration form.

### Who should attend?

- Engineers of middle management level
- Process Engineers
- Inspection Engineers
- Design Engineers
- Technical Service Engineers
- Reliability Engineers

### Registration:

The course is limited to 25 participants only and participation will be decided on first come first served basis. Interested participants can register by filling attached registration form. The course fee includes participation, course material and stationery. Tea / coffee and working lunch will be served. Participants have to make their own arrangements for accommodation and local conveyance. The course fee is non-refundable; however, in the event of cancellation of training program by TCR for some unavoidable reasons, it will be refunded. TCR accepts the change in nomination.

### Forward your Registration forms to:

**Mr. Rajesh Lakhnotra**, HOD - Training  
TCR Advanced Engineering Pvt. Ltd., 250/9 GIDC,  
Makarpura, Vadodara, Gujarat. Ph: 0265-2657233,  
7574805594-96

Email: [evolve@tcradvanced.com](mailto:evolve@tcradvanced.com)

Mobile: +91 7574801050

Registration form:

<http://tcradvanced.com/coursecalender.php>

More details:

<https://www.facebook.com/EvolveTCR/>

## Faculty:



### Mr. Paresh Haribhakti

Managing Director,  
TCR Advanced Engineering Pvt. Ltd.

Authored the book titled as "Failure Investigation of Boiler Tubes".

With an experience of 29 years in metallography and microstructure, Paresh Haribhakti has solved more than 4000 industrial issues. Being the pioneer in the field of in-situ metallography and Materials engineering, he has an expertise in petrochemical plants, oil and gas transmission pipelines, offshore structures, ships, pharmaceutical plants, food processing equipment, gas turbine engine components and weldments.



### B.K. Shah EX-Head, Quality Assurance Division. BARC

Shri B.K. Shah has done B.Sc. Eng. (Metallurgy) from Regional Institute of Technology (RIT), Jamshedpur (First Class with

Distinction- 1st Rank) and MTech. (Corrosion Sc. & Eng.) from Indian Institute of Technology (IIT), Bombay (CPI 10.0- 1st Rank). He joined BARC in 1973(17th batch of BARC Training School). He has been outstanding scientist of the department of Atomic energy. He retired as head, Quality assurance division, BARC on 31st December 2011. Presently, he is Raja Ramanan Fellow at BARC, Mumbai.



### Mr. Ketan Upadhyay

General Manager: Reliability Engineering,  
TCR Advanced Engineering Pvt. Ltd.

With an experience of 26 years in correlation of properties with composition and microstructure, Ketan Upadhyay has become an expert in manufacturing methods like casting, rolling, extrusion and forging defects. Mechanical behaviour of steel, failure analysis, Welding metallurgy as well as non-destructive technology is his passion. Ketan Upadhyay is a qualified level II for Acoustic Emission Testing (IISC, Bangalore), Vibration Analyst VT-II (Entec IRD) and Ultrasonic Flaw Detection (EEC, Mumbai).



### Dr. P B Joshi Professor Metallurgical & materials MSU- Baroda Consultant, TCR Advanced

Authored the book titled as "Failure Investigation of Boiler Tubes".

Dr. P B Joshi is a professor in department of metallurgical and materials engineering, Faculty of technology and engineering, Maharaja Sayajirao University, Vadodara. He is a Ph. D. in material engineering. Dr Joshi is having more than 25 years of teaching experience in the field of metallurgy. He has more than 50 research publications in international journals & national journals, and authored a book titled "Materials for Electrical and Electronic Contacts".



### Mr. Hemant Pradhan Consultant, TCR Advanced

He is a Mechanical Engineer with over 35 years of experience in design, detail engineering services, projects, inspection, mechanical construction, procurement,

estimation etc. for fertilizer and petrochemical plants and projects. His major experience field has been design, detailed engineering, trouble shooting of fertilizer plants like ammonia, urea, DAP, ASP, AS, phosphoric acid, sulphuric acid etc.; petrochemical plants like Caprolactam, Melamine, Nylon-6, and utility/co-generation/ boiler, water treatment plants and has participated in design conferences at international and national level with process licensors/ detail engineering firms like M/s Enco, Switzerland; M/s INCRO SA, Spain; Tunisian Joint Venture, Tunisia; M/s Schmidt & Clemens, Germany M/s Davy Powergas, M/s Uhde, M/s Linde, at India.

#### **Key Benefits:**

- Understanding of various NDT techniques
- Working Understanding of use of NDT techniques
- Gaining the knowledge required to conduct or supervise basic NDT testing
- Gaining the knowledge to improve reliability of company operations and enhancing competence